

# SAFETY DATA SHEET

Based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010

# Fix All Crystal

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product name : Fix All Crystal

Registration number REACH : Not applicable (mixture)

Product type REACH : Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against:

1.2.1 Relevant identified uses

Adhesive Sealant

1.2.2 Uses advised against

No uses advised against known

1.3 Details of the supplier of the safety data sheet:

Supplier of the safety data sheet

SOUDAL N.V. Everdongenlaan 18-20 B-2300 Turnhout **3** +32 14 42 42 31 +32 14 42 65 14 msds@soudal.com

#### Manufacturer of the product

SOUDAL N.V. Everdongenlaan 18-20 B-2300 Turnhout **2** +32 14 42 42 31 +32 14 42 65 14 msds@soudal.com

# 1.4 Emergency telephone number:

24h/24h (Telephone advice: English, French, German, Dutch): +32 14 58 45 45 (BIG)

# SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture:

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

# 2.2 Label elements:

Hazard pictograms

No pictogram is used

Signal word No signal word

H-statements

Harmful to aquatic life with long lasting effects. H412

P-statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

# 2.3 Other hazards:

Slightly irritant to eyes

DSD/DPD

Slightly irritant to eyes

# SECTION 3: Composition/information on ingredients

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

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Technische Schoolstraat 43 A, B-2440 Geel

Publication date: 2011-07-26

Date of revision: 2015-06-12

Product number: 51345 1/20

## 3.1 Substances:

Not applicable

#### 3.2 Mixtures:

Name REACH Registration No	CAS No EC No		Conc. (C)	Classification according to CLP	Note	Remark	
3-(trimethoxysilyl)propylamine 01-2119510159-45		13822-56-5 237-511-5		1% <c<2.5%< th=""><th>Skin Irrit. 2; H315 Eye Dam. 1; H318</th><th>(1)(10)</th><th>Constituent</th></c<2.5%<>	Skin Irrit. 2; H315 Eye Dam. 1; H318	(1)(10)	Constituent
bis(1,2,2,6,6-pentamethyl-4-pip dimethylethyl)-4- hydroxyphenyl]methyl]butylma 01-2119978231-37		63843-89-0 264-513-3			STOT RE 1; H372 Acute Tox. 4; H302 Aquatic Chronic 1; H410	(1)	Constituent
dioctylbis(pentane-2,4-dionato- 01-0000020199-67	' '	54068-28-9 483-270-6			STOT SE 2; H371 STOT RE 2; H373 Skin Sens. 1; H317	(1)(8)(10)	Constituent
methanol 01-2119433307-44		67-56-1 200-659-6			Flam. Liq. 2; H225 Acute Tox. 2; H330 Acute Tox. 3; H311 Acute Tox. 3; H301 STOT SE 1; H370	(1)(2)(8)(10)	Constituent

<sup>(1)</sup> For H-statements in full: see heading 16

- (2) Substance with a Community workplace exposure limit
- (8) Specific concentration limits, see heading 16
- (10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

# SECTION 4: First aid measures

# 4.1 Description of first aid measures:

General:

If you feel unwell, seek medical advice.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Rinse with water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Consult a doctor/medical service if you feel unwell.

# 4.2 Most important symptoms and effects, both acute and delayed:

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact:

Slight irritation.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

# 4.3 Indication of any immediate medical attention and special treatment needed:

If applicable and available it will be listed below.

# SECTION 5: Firefighting measures

# 5.1 Extinguishing media:

5.1.1 Suitable extinguishing media:

Polyvalent foam. Dry chemical powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

# 5.2 Special hazards arising from the substance or mixture:

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours, hydrogen chloride.

# 5.3 Advice for firefighters:

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Date of revision: 2015-06-12

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#### 5.3.1 Instructions:

Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

# SECTION 6: Accidental release measures

# 6.1 Personal precautions, protective equipment and emergency procedures:

No naked flames.

# 6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

### 6.1.2 Protective equipment for emergency responders

Gloves. Protective clothing.

Suitable protective clothing

See heading 8.2

### 6.2 Environmental precautions:

Contain leaking substance. Dam up the solid spill. Prevent soil and water pollution. Prevent spreading in sewers. Use appropriate containment to avoid environmental contamination.

#### 6.3 Methods and material for containment and cleaning up:

Cover the solid spill with sand/kieselguhr. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

# 6.4 Reference to other sections:

See heading 13.

# SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 7.1 Precautions for safe handling:

Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed. Do not discharge the waste into the drain.

# 7.2 Conditions for safe storage, including any incompatibilities:

7.2.1 Safe storage requirements:

Store at room temperature. Meet the legal requirements. Max. storage time: 1 year(s).

### 7.2.2 Keep away from:

Heat sources.

# 7.2.3 Suitable packaging material:

Plastics

### 7.2.4 Non suitable packaging material:

No data available

# 7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

# SECTION 8: Exposure controls/personal protection

# 8.1 Control parameters:

# 8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

# The Netherlands

Methanol		Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	100 ppm
		Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	133 mg/m³
Tinverbindingen (organis	ch)(als Sn)	Time-weighted average exposure limit 8 h (Private occupational exposure limit value)	0.1 mg/m³
		Short time value (Private occupational exposure limit value)	0.2 mg/m³

# EU

Methanol	Time-weighted average exposure limit 8 h (Indicative occupational	200 ppm
	exposure limit value)	
	Time-weighted average exposure limit 8 h (Indicative occupational	260 mg/m³
	exposure limit value)	

#### Belgium

Reason for revision: 2;12.2;14		Publication date: 2011-07-26
		Date of revision: 2015-06-12

Revision number: 0300 Product number: 51345 3 / 20

1	Alcool méthylique					
	Alcool methylique			Time-weighted average exp	osure limit 8 h	200 ppm
				Time-weighted average exp		266 mg/m³
				Short time value	553. C IIIIIC 6 71	<u>.</u>
						250 ppm
L				Short time value		333 mg/m³
E	Etain (composés organiq	ues de) (en S	n)	Time-weighted average exp	osure limit 8 h	0.1 mg/m <sup>3</sup>
				Short time value		0.2 mg/m <sup>3</sup>
	HEA CHIV ACCIII)					<u>'</u>
-	USA (TLV-ACGIH) Methanol			Time-weighted average exp	osure limit 8 h (TLV - Adopted Value	e) 200 ppm
				Short time value (TLV - Ado	oted Value)	250 ppm
þ	Tin organic compounds,	as Sn		,	osure limit 8 h (TLV - Adopted Value	
	. J			Short time value (TLV - Ado		0.2 mg/m <sup>3</sup>
L				The time value (127 Ado		V-2 ·116/ 111
-	Germany			Time weighted arrest	ocura limit 9 h /TDCC 000)	200
ľ	Methanol			Time-weighted average exp		200 ppm
L				Time-weighted average exp	osure limit 8 h (TRGS 900)	270 mg/m <sup>3</sup>
_	France					
Ī	Etain (composés organiq	ues d'), en Sr	1	réglementaire indicative)	osure limit 8 h (VL: Valeur non	0.1 mg/m <sup>3</sup>
				Short time value (VL: Valeur	non réglementaire indicative)	0.2 mg/m <sup>3</sup>
Ī	Methanol			Time-weighted average exp	osure limit 8 h (VRC: Valeur réglem	
				contraignante)	ocura limit 9 h (VDC: V=1===4=1	ontaire 200 / 3
					osure limit 8 h (VRC: Valeur réglem	nentaire 260 mg/m³
				contraignante)	non ráglomentaire indicative	1000 222
					non réglementaire indicative)	1000 ppm
l				Short time value (VL: Valeur	non réglementaire indicative)	1300 mg/m <sup>3</sup>
-	UK			L	11 11 01 111 1	ı, <u>ı, laaa</u>
ı	Methanol				osure limit 8 h (Workplace exposur	e limit 200 ppm
				(EH40/2005))		
					osure limit 8 h (Workplace exposur	re limit 266 mg/m³
				(EH40/2005))	1 1 /F:: 20 /200F))	250
				Snort time value (Workplace	e exposure limit (EH40/2005))	250 ppm
					e exposure limit (EH40/2005))	333 mg/m³
ļ	Tin compounds, organic,	except Cyhe	xatin (ISO), (as Sn)	Time-weighted average exp	e exposure limit (EH40/2005)) osure limit 8 h (Workplace exposur	
Ī	Tin compounds, organic,	except Cyhe	xatin (ISO), (as Sn)	Time-weighted average exp (EH40/2005))	osure limit 8 h (Workplace exposur	re limit 0.1 mg/m³
Ī	Tin compounds, organic,	except Cyhe	xatin (ISO), (as Sn)	Time-weighted average exp (EH40/2005))		
			xatin (ISO), (as Sn)	Time-weighted average exp (EH40/2005))	osure limit 8 h (Workplace exposur	re limit 0.1 mg/m³
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8.1.3 8.1.3 8.1.4 8.1.4 8.1.4	b) National biological lim  If limit values are applica  2 Sampling methods  If applicable and availabl  Methanol (organic and in  Methanol (Volatile Organic  Methyl Alcohol (Methan)  Methyl Alcohol  3 Applicable limit values  If limit values are applica  4 DNEL/PNEC values  DNEL - Workers  3-(trimethoxysilyl)propyl  Effect level (DNEL/DM  DNEL  bis(1,2,2,6,6-pentameth)  Effect level (DNEL/DM  DNEL	it values ble and avail e it will be lis norganic gase nic compound ol) s when using ble and avail amine EL) vI-4-piperidyl EL)	able these will be listed b ted below. es by Extractive FTIR) ds)  the substance or mixture able these will be listed b  Type Long-term systemic effect Long-term systemic effect li[3,5-bis(1,1-dimethylet] Type Long-term systemic effect	Time-weighted average exp (EH40/2005)) Short time value (Workplace) elow.  NIOSH NIOSH NIOSH OSHA e as intended elow.  cts inhalation cts dermal hyl)-4-hydroxyphenyl]methy	e exposure limit 8 h (Workplace exposure exposure limit (EH40/2005))  3800 2549 2000 91  Value Rer 58 mg/m³ 8.3 mg/kg bw/day   butylmalonate   Value   Rer 0.05 mg/m³ 0.07 mg/kg bw/day	e limit 0.1 mg/m³ 0.2 mg/m³
8.1.3 8.1.3 8.1.4 8.1.4 8.1.4	b) National biological lim  If limit values are applica  2 Sampling methods  If applicable and availabl  Methanol (organic and in  Methanol (Volatile Organic  Methyl Alcohol (Methan)  Methyl Alcohol  3 Applicable limit values  If limit values are applica  4 DNEL/PNEC values  DNEL - Workers  3-(trimethoxysilyl)propyl  Effect level (DNEL/DM  DNEL  bis(1,2,2,6,6-pentameth)  Effect level (DNEL/DM  DNEL  dioctylbis(pentane-2,4-d-d)	it values ble and avail e it will be lis norganic gase nic compound ol) s when using ble and avail amine EL) vI-4-piperidyl EL)	able these will be listed b ted below. es by Extractive FTIR) ds)  the substance or mixture able these will be listed b  Type Long-term systemic effect Long-term systemic effect [13,5-bis(1,1-dimethylet] Type Long-term systemic effect [14,5-bis(1,1-dimethylet] [15,5-dimethylet] [15	Time-weighted average exp (EH40/2005)) Short time value (Workplace elow.  NIOSH NIOSH NIOSH OSHA e as intended elow.  cts inhalation cts dermal hyl)-4-hydroxyphenyl]methy cts inhalation cts dermal	e exposure limit 8 h (Workplace exposure exposure limit (EH40/2005))  3800 2549 2000 91  Value Rer 58 mg/m³ 8.3 mg/kg bw/day   butylmalonate Rer 0.05 mg/m³ 0.07 mg/kg bw/day  Value Rer	mark  0.1 mg/m³  0.2 mg/m³
8.1.3 8.1.3 8.1.4 8.1.4 8.1.4	b) National biological lim  If limit values are applica  2 Sampling methods  If applicable and availabl  Methanol (organic and ir  Methanol (Volatile Organic and ir  Methyl Alcohol (Methanic and ir)  Methyl Alcohol (Methanic and ir)  Methyl Alcohol (Methanic and ir)  Applicable limit values  If limit values are applicated and ir)  A DNEL/PNEC values  DNEL - Workers  3-(trimethoxysilyl)propyl  Effect level (DNEL/DMIC and ir)  DNEL  bis(1,2,2,6,6-pentamethylic and ir)  Effect level (DNEL/DMIC and ir)  DNEL  dioctylbis(pentane-2,4-delegate)  Effect level (DNEL/DMIC and ir)	it values ble and avail e it will be lis norganic gase nic compound ol) s when using ble and avail amine EL) vI-4-piperidyl EL)	able these will be listed b ted below. es by Extractive FTIR) ds)  the substance or mixture able these will be listed b  Type Long-term systemic effect Long-term systemic effect Long-term systemic effect in Type Long-term systemic effect in Type Long-term systemic effect	Time-weighted average exp (EH40/2005)) Short time value (Workplace elow.  NIOSH NIOSH NIOSH OSHA e as intended elow.  cts inhalation cts dermal hyl)-4-hydroxyphenyl]methy cts inhalation cts dermal	e exposure limit 8 h (Workplace exposure exposure limit (EH40/2005))  3800 2549 2000 91  Value Rer 58 mg/m³ 8.3 mg/kg bw/day   butylmalonate   Value   Rer 0.05 mg/m³ 0.07 mg/kg bw/day  Value   Rer 84 mg/m³	mark  0.1 mg/m³  0.2 mg/m³
8.1.3 8.1.3 8.1.4 8.1.4 8.1.4	b) National biological lim  If limit values are applica  2 Sampling methods  If applicable and availabl  Methanol (organic and ir  Methanol (Volatile Organic and ir  Methyl Alcohol (Methanic and ir)  Japplicable limit values  If limit values are applica  4 DNEL/PNEC values  DNEL - Workers  3-(trimethoxysilyl)propyl  Effect level (DNEL/DMic and ir)  DNEL  bis(1,2,2,6,6-pentamethylic and ir)  Effect level (DNEL/DMic and ir)  DNEL  dioctylbis(pentane-2,4-del  Effect level (DNEL/DMic and ir)  Effect level (DNEL/DMic and ir)	it values ble and avail e it will be lis norganic gase nic compound ol) s when using ble and avail amine EL) vI-4-piperidyl EL)	able these will be listed b ted below. es by Extractive FTIR) ds)  the substance or mixture able these will be listed b  Type Long-term systemic effect Long-term systemic effect I [3,5-bis(1,1-dimethylet) Type Long-term systemic effect in Type Long-term systemic effect in Type Long-term systemic effect in Type Long-term systemic effect Acute systemic effects in	Time-weighted average exp (EH40/2005)) Short time value (Workplace elow.  NIOSH NIOSH NIOSH OSHA e as intended elow.  cts inhalation cts dermal hyl)-4-hydroxyphenyl]methy cts inhalation cts dermal	e exposure limit 8 h (Workplace exposure exposure limit (EH40/2005))  3800 2549 2000 91  Value Rer 58 mg/m³ 8.3 mg/kg bw/day   butylmalonate   Value Rer 0.05 mg/m³ 0.07 mg/kg bw/day  Value Rer 84 mg/m³ 84 mg/m³ 84 mg/m³	mark  0.1 mg/m³  0.2 mg/m³
8.1.3 8.1.3 8.1.4 8.1.4 8.1.4	b) National biological lim  If limit values are applica  2 Sampling methods  If applicable and availabl  Methanol (organic and ir  Methanol (Volatile Organic and ir  Methyl Alcohol (Methanic and ir)  Japplicable limit values  If limit values are applica  4 DNEL/PNEC values  DNEL - Workers  3-(trimethoxysilyl)propyl  Effect level (DNEL/DMic and ir)  DNEL  bis(1,2,2,6,6-pentamethylic and ir)  Effect level (DNEL/DMic and ir)  DNEL  dioctylbis(pentane-2,4-del  Effect level (DNEL/DMic and ir)  Effect level (DNEL/DMic and ir)	it values ble and avail e it will be lis norganic gase nic compound ol) s when using ble and avail amine EL) vI-4-piperidyl EL)	able these will be listed b ted below. es by Extractive FTIR) ds)  the substance or mixture able these will be listed b  Type Long-term systemic effect Long-term systemic effect in Type Long-term systemic effects in Long-term local effects in	Time-weighted average exp (EH40/2005)) Short time value (Workplace elow.  NIOSH NIOSH NIOSH OSHA e as intended elow.  cts inhalation cts dermal hyl)-4-hydroxyphenyllmethy cts inhalation cts dermal cts inhalation cts dermal	Same   Same	mark  0.1 mg/m³  0.2 mg/m³
8.1.3 8.1.3 8.1.4 8.1.4 8.1.4	b) National biological lim  If limit values are applica  2 Sampling methods  If applicable and availabl  Methanol (organic and ir  Methanol (Volatile Organic and ir  Methyl Alcohol (Methanic and ir)  Japplicable limit values  If limit values are applica  4 DNEL/PNEC values  DNEL - Workers  3-(trimethoxysilyl)propyl  Effect level (DNEL/DMic and ir)  DNEL  bis(1,2,2,6,6-pentamethylic and ir)  Effect level (DNEL/DMic and ir)  DNEL  dioctylbis(pentane-2,4-del  Effect level (DNEL/DMic and ir)  Effect level (DNEL/DMic and ir)	it values ble and avail e it will be lis norganic gase nic compound ol) s when using ble and avail amine EL) vI-4-piperidyl EL)	able these will be listed b ted below. es by Extractive FTIR) ds)  the substance or mixture able these will be listed b  Type Long-term systemic effect Long-term systemic effect I [3,5-bis(1,1-dimethylet) Type Long-term systemic effect in Type Long-term systemic effect in Type Long-term systemic effect in Type Long-term systemic effect Acute systemic effects in	Time-weighted average exp (EH40/2005)) Short time value (Workplace elow.  NIOSH NIOSH NIOSH OSHA e as intended elow.  cts inhalation cts dermal hyl)-4-hydroxyphenyllmethy cts inhalation cts dermal cts inhalation cts dermal	e exposure limit 8 h (Workplace exposure exposure limit (EH40/2005))  3800 2549 2000 91  Value Rer 58 mg/m³ 8.3 mg/kg bw/day   butylmalonate   Value Rer 0.05 mg/m³ 0.07 mg/kg bw/day  Value Rer 84 mg/m³ 84 mg/m³ 84 mg/m³	mark  0.1 mg/m³  0.2 mg/m³
8.1.3 8.1.3 8.1.4 8.1.4 8.1.4	b) National biological lim  If limit values are applica  2 Sampling methods  If applicable and availabl  Methanol (organic and ir  Methanol (Volatile Organic and ir  Methyl Alcohol (Methanic and ir)  Japplicable limit values  If limit values are applica  4 DNEL/PNEC values  DNEL - Workers  3-(trimethoxysilyl)propyl  Effect level (DNEL/DMic and ir)  DNEL  bis(1,2,2,6,6-pentamethylic and ir)  Effect level (DNEL/DMic and ir)  DNEL  dioctylbis(pentane-2,4-del  Effect level (DNEL/DMic and ir)  Effect level (DNEL/DMic and ir)	it values ble and avail e it will be lis norganic gase nic compound ol) s when using ble and avail amine EL) vI-4-piperidyl EL)	able these will be listed b ted below. es by Extractive FTIR) ds)  the substance or mixture able these will be listed b  Type Long-term systemic effect Long-term systemic effect in Type Long-term systemic effects in Long-term local effects in	Time-weighted average exp (EH40/2005)) Short time value (Workplace elow.  NIOSH NIOSH NIOSH OSHA e as intended elow.  cts inhalation cts dermal hyl)-4-hydroxyphenyllmethy cts inhalation cts dermal cts inhalation cts dermal	Same   Same	mark  0.1 mg/m³  0.2 mg/m³
8.1.3 8.1.3 8.1.4 8.1.4 2	b) National biological lim  If limit values are applica  2 Sampling methods  If applicable and availabl  Methanol (organic and ir  Methanol (Volatile Organic and ir  Methyl Alcohol (Methanic and ir)  Japplicable limit values  If limit values are applica  4 DNEL/PNEC values  DNEL - Workers  3-(trimethoxysilyl)propyl  Effect level (DNEL/DMic and ir)  DNEL  bis(1,2,2,6,6-pentamethylic and ir)  Effect level (DNEL/DMic and ir)  DNEL  dioctylbis(pentane-2,4-del  Effect level (DNEL/DMic and ir)  Effect level (DNEL/DMic and ir)	it values ble and avail e it will be lis norganic gase nic compound ol) s when using ble and avail amine EL) vI-4-piperidyl EL)	able these will be listed b ted below. es by Extractive FTIR) ds)  the substance or mixture able these will be listed b  Type Long-term systemic effect Long-term systemic effect in Type Long-term systemic effects in Long-term local effects in	Time-weighted average exp (EH40/2005)) Short time value (Workplace elow.  NIOSH NIOSH NIOSH OSHA e as intended elow.  cts inhalation cts dermal hyl)-4-hydroxyphenyllmethy cts inhalation cts dermal cts inhalation cts dermal	Same   Same	mark  0.1 mg/m³  0.2 mg/m³

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Effect level (DNEL/DMEL)	Туре		Value		Remark
DNEL	Acute systemic e	fects dermal	40 mg/kg by	v/day	
	Acute systemic e	fects inhalation	260 mg/m <sup>3</sup>		
	Acute local effect	<mark>s inhala</mark> tion	260 mg/m <sup>3</sup>		
	Long-term syster	nic effects dermal	40 mg/kg by	v/day	
	Long-term syster	nic effects inhalation	260 mg/m <sup>3</sup>		
	Long-term local e	ffects inhalation	260 mg/m <sup>3</sup>		
NEL - General population					•
(trimethoxysilyl)propylamine					
Effect level (DNEL/DMEL)	Туре		Value		Remark
DNEL	Long-term syster	nic effects inhalation	17 mg/m³		
	Long-term syster	nic effects dermal	5 mg/kg bw	/day	
	Long-term syster	nic effects oral	5 mg/kg bw	/day	
s(1,2,2,6,6-pentamethyl-4-pipe	eridyl) [[3,5-bis(1,1-dim	ethylethyl)-4-hydroxypheny	]methyl]butylmalonat	2	•
Effect level (DNEL/DMEL)	Туре		Value		Remark
DNEL	Long-term syster	nic effects inhalation	0.01 mg/m <sup>3</sup>		
		nic effects dermal	33 μg/kg bw	/day	
	Long-term syster		3 μg/kg bw/		
ethanol	<u> </u>		1 1 3 3 1	,	I
Effect level (DNEL/DMEL)	Туре		Value		Remark
DNEL	Acute systemic e	fects dermal	8 mg/kg bw	/day	
	Acute systemic e		50 mg/m <sup>3</sup>		
	Acute local effect		50 mg/m³		
	Long-term syster	nic effects dermal	8 mg/kg bw	/dav	
		nic effects inhalation	50 mg/m <sup>3</sup>		
	Long-term local e		50 mg/m <sup>3</sup>		
NEC	Long termiocare	Teets I I I I I I I I I I I I I I I I I I I	50 1116/111		
(trimethoxysilyl)propylamine					
Compartments	l l	'alue		Remark	
Fresh water		.33 mg/l		Kernark	
Marine water		.033 mg/l			
Aqua (intermittent releases)		.3 mg/l			
STP		3 mg/l			
Fresh water sediment		.2 mg/kg sediment dw			
Marine water sediment		.12 mg/kg sediment dw			
		.045 mg/kg soil dw			
Soil					
Oral		4.4 mg/kg food	n h		
s(1,2,2,6,6-pentamethyl-4-pipe			Ilmetnyilbutyimaionat		
Compartments		/alue		Remark	
Fresh water		.00002 mg/l			
Marine water		.000002 mg/l			
Aqua (intermittent rele <mark>ases)</mark>		.61 mg/l			
STP		mg/l			
Fresh water sediment		52.2 mg/kg sediment dw			
Marine water sediment		5.22 mg/kg sediment dw			
Soil		mg/kg soil dw			
octylbis(pentane-2,4-d <mark>ionato-0</mark>	),O')tin				
Compartments	N	/alue		Remark	
Fresh water		<mark>.026 m</mark> g/l			
Marine water	(	<mark>.0026 m</mark> g/l			
Aqua (intermittent rele <mark>ases)</mark>		.26 mg/l			
STP	1	mg/l			
Fresh water sediment	C	.155 mg/kg sediment dw			
Marine water sediment	C	.0155 mg/kg sediment dw			
Soil	C	.0158 mg/kg soil dw			
ethanol					
Compartments	1	'alue		Remark	
Fresh water	2	0.8 mg/l		- /	
Marine water		.08 mg/l			
		540 mg/l			
Aqua (intermittent releases)		7 mg/kg sediment dw			
Fresh water sediment		.7 mg/kg sediment dw			
Fresh water sediment Marine water sediment					
Fresh water sediment Marine water sediment Soil	3	.18 mg/kg soil dw			
Fresh water sediment Marine water sediment Soil STP	3				
Fresh water sediment Marine water sediment Soil	1	.18 mg/kg soil dw			

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# 8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

# 8.2.1 Appropriate engineering controls

Keep away from naked flames/heat.

# 8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.

# a) Respiratory protection:

Respiratory protection not required in normal conditions.

# b) Hand protection:

Gloves.

# c) Eye protection:

Safety glasses.

d) Skin protection:

Protective clothing.

#### 8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

# SECTION 9: Physical and chemical properties

# 9.1 Information on basic physical and chemical properties:

Physical form		Paste Paste						
Odour		Imost odourless						
Odour threshold		o data available						
Colour		Variable in colour, depending on the composition						
Particle size		No data available						
Explosion limits		No data available						
Flammability		Not easily combustible						
Log Kow		Not applicable (mixture)						
Dynamic viscosity		No data available						
Kinematic viscosity		No data available						
Melting point		No data available						
Boiling point		No data available						
Flash point		No data available						
Evaporation rate		No data available						
Relative vapour density		No data available						
Vapour pressure		No data available						
Solubility		water ; insoluble						
Relative density		No data available						
Decomposition tempera	ture	No data available						
Auto-ignition temperatu	re	No data available						
Explosive properties		No chemical group associated with explosive properties						
Oxidising properties		No chemical group associated with oxidising properties						
рН		No data available						

# 9.2 Other information:

Surface tension	No data available	
Absolute density	No data available	

# SECTION 10: Stability and reactivity

# 10.1 Reactivity:

Heating increases the fire hazard.

# 10.2 Chemical stability:

Stable under normal conditions.

# 10.3 Possibility of hazardous reactions:

No data available.

### 10.4 Conditions to avoid:

Keep away from naked flames/heat.

# 10.5 Incompatible materials:

No data available.

# 10.6 Hazardous decomposition products:

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours, hydrogen chloride.

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# SECTION 11: Toxicological information

# 11.1 Information on toxicological effects:

11.1.1 Test results

### Acute toxicity

# Fix All Crystal

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	Equivalent to OECD 401	2.970 ml/kg bw		Rat (male)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	11.3 ml/kg bw	24 h	Rabbit (male)	Experimental value	
Inhalation (vapours)	LC50	OECD 403	> 5 ppm	6 h	Rat (male)	Read-across	
Inhalation (vapours)	LC50	OECD 403	> 16 ppm	6 h	Rat (female)	Read-across	

bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	Equivalent to OECD 401	1490 mg/kg bw		Rat (male/female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 3170 mg/kg bw	24 h	Rat (male/female)	Experimental value	
Inhalation (aerosol)	LC50	Equivalent to OECD	> 460 mg/m³ air	4 h	Rat (male/female)	Experimental value	

dioctylbis(pentane-2,4-dionato-O,O')tin

Route of exposure	Para	meter	Method	Value	Exposure time		Value determination	Remark
Oral	LD50	)	OECD 423	2500 mg/kg		Rat (female)	Experimental value	
Dermal	LD50	)	OECD 402	> 2000 mg/g	24 h	Rat (male/female)	Experimental value	
Inhalation (vapours)	LC50		Equivalent to OECD 403	1224 ppm	4 h	Rat (male/female)	Experimental value	

methanol

Route of exposure	Param	eter	Method	Value	Exposure time		Value determination	Remark
Oral	LD50			1187 mg/kg bw - 2769 mg/kg bw		Rat (male/female)	Weight of evidence	
Oral	LD0		Equivalent to OECD 401	> 2528 mg/kg bw		Rat	Experimental value	
Oral				category 3			Annex VI	
Dermal				category 3			Annex VI	
Inhalation (vapours)	LC50		BASF test	128.2 mg/l air	4 h	Rat (male/female)	Weight of evidence	
Inhalation		•		category 2			Annex VI	

Judgement is based on the relevant ingredients

# Conclusion

Not classified for acute toxicity

# Corrosion/irritation

Fix All Crystal

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye		Equivalent to		24; 48; 72 hours	Rabbit	Read-across	
	damage	OECD 405					
Skin	Irritating	OECD 404	<mark>3 min-</mark> 4 h	1; 24; 48; 72; 168	Rat	Calculated value	
			_	hours			

 $\underline{\text{bis}(1,2,2,6,6-\text{pentamethyl-4-piperidyl})} \ [[3,5-\text{bis}(1,1-\text{dimethylethyl})-4-\text{hydroxyphenyl}] \\ \text{methyl}] \\ \text{butylmalonate}$ 

Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
						determination	
Eye	J	Equivalent to OECD 405	30 seconds	24; 48; 72 hours	Rabbit	Experimental value	
Skin	J	Equivalent to OECD 404	24 h	24; 72 hours	Rabbit	Experimental value	

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dioctylbis(pentane-2,4-dionato-O,O')tin
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Route of exposure	Result	Method	Exposure time	Time point		Value determination	Remark
Eye	Not irritating	OECD 405		24; 72 hours	Rabbit	Experimental value	
Skin	Not irrit <mark>ating</mark>	OECD 404	<mark>4 h</mark>	1 hour	Rabbit	Experimental value	

#### methano

Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
						determination	
Eye	Not irrit <mark>ating</mark>	BASF test		1; 24 hours	Rabbit	Experimental value	
Eye	Not irrit <mark>ating</mark>	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	BASF test	20 h	48; 72 hours	Rabbit	Experimental value	

Judgement is based on the relevant ingredients

# Conclusion

Not classified as irritating to the skin Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

# Respiratory or skin sensitisation

#### Fix All Crystal

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Route of exposure		Method		Observation time point	Species	Value determination	Remark
Skin	Not sens <mark>itizing</mark>	OECD 406	72 h	,	Guinea pig (male/female)	Experimental value	

bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

Route of exposure	Result	Method	Observation time point	Species	Value determination	Remark
Skin	Not sens <mark>itizing</mark>	Other		Guinea pig (male/female)	Experimental value	

dioctylbis(pentane-2,4-dionato-0,0')tin

Route of exposure	Result	Method	Exposu	 Observation time point	Species	Value determination	Remark
Skin	Sensitizi <mark>ng</mark>	OECD 429			Mouse (female)	Experimental value	

<u>methanol</u>

Route of exposure	Result	Method	Observation time point	Species	Value determination	Remark
Skin		Equivalent to OECD 406	, , , ,	Guinea pig (female)	Experimental value	

Judgement is based on the relevant ingredients

# Conclusion

Not classified as sensitizing for skin Not classified as sensitizing for inhalation

# Specific target organ toxicity

# Fix All Crystal

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	LOAEL	OECD 408	600 mg/kg bw/day		Clinical signs; mortality; body weight; food consumption	/ ( - /	Rat (male/female)	Read-across
Oral (stomach tube)	NOAEL	OECD 408	200 mg/kg bw/day	Liver	No effect	/ ( - /	Rat (male/female)	Read-across
	IRT (inhala <mark>tion</mark> risk test)	Equivalent to OECD 412	147 mg/m³ air			4 weeks (6h/day, 5 days/week)	Rat (male)	Read-across

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Route of exposure	Parame	eter	Method	Value	Organ		Effect	Exposure time	Species	Value determination
Oral (stomach tube)	LOAEL		OECD 421	10 mg/kg bw/day	Lymph no		Enlargement of the lymph glands		Rat (male/female)	Experimenta value
Oral (stomach tube)	LOAEL		OECD 421	10 mg/kg bw/day	Liver		Enlargement/aff ection of the liver	28 day(s)	Rat (male/female)	Experimenta value
Oral (stomach tube)	LOAEL		OECD 421	10 mg/kg bw/day	Spleen		Spleen enlargement/aff ection	28 day(s)	Rat (male/female)	Experimenta value
tylbis(pentane-2,4-	dionato	-0,0'	)tin	1						
Route of exposure			Method	Value	Organ		Effect	Exposure time	Species	Value determination
Oral (diet)	NOAEL		OECD 422	0.3 mg/kg bw/day - 0.5 mg/kg bw/day	Thymus		No effect	28 day(s)	Rat (male/female)	Experimenta value
Dermal										Data waiving
Inhalation (vapours)	NOEC		Equivalent to OECD 413	100 ppm			No effect	14 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimenta value
Inhalation (vapours)	LOAEC		Equivalent to OECD 413	650 ppm	Various o	rgans	Histopathology	14 weeks (6h/day, 5 days/week)	Rat (male/female)	Experimenta value
<u>hanol</u>			,						•	
Route of exposure	Parame	eter	Method	Value	Organ		Effect	Exposure time	Species	Value determination
Oral	LOAEL		Other	2340 mg/kg bw/day			Mortality	3 day(s)	Monkey (male)	Experimenta value
Oral (stomach tube)			Incident				Visual disturbances to permanent blindness		Human (male)	
Inhalation	NOAEC		Other	0.013 mg/l air				29 month(s)	Monkey	Weight of evidence
Inhalation	LOAEC			0.13 mg/l air	Brain		Brain affection	29 week(s)	Monkey	Weight of evidence
Inhalation			Other	1.6 mg/l air			Visual disturbances to permanent blindness		Human	
Inhalation (vapours)	NOAEC		Equivalent to OECD 412	6.66 mg/l air			No effect	4 weeks (6h/day, 5 days/week)	Rat (male/female)	Weight of evidence
Inhalation	NOAEC		Equivalent to OECD 453	1.3 mg/l air			No effect	12 month(s)	Mouse (male/female)	Weight of evidence
Inhalation	NOEC		Equivalent to	0.13 mg/l air			No effect	12 month(s)	Rat	Weight of
(vapours)			OECD 453						(male/female)	evidence
Inhalation	NOEC		Human	0.26 mg/l air	Central n	ervous	No effect	4 h	Human	Weight of

Not classified for subchronic toxicity

# Mutagenicity (in vitro)

Fix All Crystal
No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic	OECD 476	Chinese hamster ovary (CHO)	No effect	Read-across
activation, negative without				
metabolic activation				
Negative with metabolic	OECD 473	Chinese hamster lung	No effect	Read-across
activation, negative without		fibroblasts		
metabolic activation				
Negative with metabolic	OECD 471	Escherichia coli	No effect	Experimental value
activation, negative without				
metabolic activation				
Negative with metabolic	OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value
activation, negative without				
metabolic activation				

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Result		Method				-hydroxyphenyl]me Test substrate		Effect			Value	determination
Negative wit	h metabolic	Ames te	est			Bacteria (S.typhim	urium)	No effe	ct		Exper	imental value
_	egative withou						, 					
Negative wit activation, ne metabolic ac	egative withou	OECD 4	76			Chinese hamster o	ovary (CHO)	No effe	ct		Exper	imental value
Positive with activation, p	n metabolic ositive without	OECD 4	73			Chinese hamster o	ovary (CHO)				Exper	imental value
metabolic ac dioctylbis(penta		O O'\tin										
Result	11e-2,4-dioriato	Method	4			Test substrate		Effect			Value	determination
Negative		OECD 4				Chinese hamster l		No effe	ct			imental value
Negative		OECD 4	73			fibroblasts Chinese hamster l	ung	No effe	ct		Exper	imental value
Negative		OECD 4	OECD 471			fibroblasts Bacteria (S.typhim		No effe	ct			imental value
<u>methanol</u>						(7)						
Result		Method	t			Test substrate		Effect			Value	determination
Negative wit activation, ne metabolic ac	egative withou	OECD 471				Bacteria (S.typhim	urium)	No effe	ct		Weigh	nt of evidence
Negative wit	th metabolic egative withou		ent to OI	ECD 476		Chinese hamster li fibroblasts	ung	No effe	ct		Weigh	nt of evidence
Negative wit	th metabolic egative withou	OECD 4	71			Escherichia coli		No effe	ct	t		nt of evidence
	thout metabolic	OECD 4	73			Chinese hamster li fibroblasts	ung	No effe	effect		Weigh	nt of evidence
genicity (in vivo	)											
	•											
<u>All Crystal</u> No (test)data on	the mixture av											
All Crystal No (test)data on B-(trimethoxysil	the mixture av		Method		Evno	sura tima	Tact cubet	rato		Organ		Value determin
All Crystal No (test)data on 3-(trimethoxysily Result Negative	the mixture av	<b>r</b>	•	ent to OECD	Expo	sure time	Test substr		ale)	<b>Organ</b> Bone marr	row	Value determin Read-across
No (test)data on B-(trimethoxysilve Result Negative	the mixture av	<b>F</b>			Expo	sure time			ale)		row	
All Crystal No (test)data on B-(trimethoxysil Result	the mixture av	[ E / -O,O')tin	Equivale	ent to OECD		sure time		ale/fema	ale)		row	
All Crystal No (test)data on B-(trimethoxysil Result Negative	the mixture av	-O,O')tin	Equivale 474	ent to OECD			Mouse (ma	ale/fema	ale)	Bone marr		Read-across
All Crystal No (test)data on 8-(trimethoxysil Result Negative dioctylbis(penta Result Negative	the mixture av	-O,O')tin	Equivale 474 <b>Method</b>	ent to OECD			Mouse (ma	ale/fema	ale)	Bone marr  Organ		Read-across  Value determin
All Crystal No (test)data on B-(trimethoxysilv Result Negative dioctylbis(penta Result	the mixture av	-O,O')tin	Equivale 474 Method OECD 47	ent to OECD	Expo		Mouse (ma	rate	ale)	Organ Bone marr		Read-across  Value determin  Experimental va
All Crystal No (test)data on B-(trimethoxysilv Result Negative dioctylbis(penta Result Negative Negative methanol Result	the mixture av	-O,O')tin	Equivale 474 <b>Method</b>	ent to OECD	Expos	sure time sure time	Mouse (ma	rate ale)	ale)	Bone marr  Organ		Read-across  Value determin
All Crystal No (test)data on B-(trimethoxysilvant) Result Negative  dioctylbis(penta Result Negative methanol Result Negative	the mixture av	-O,O')tin	Equivale 474 Method OECD 47 Method	74	Expos	sure time sure time vs (6h/day)	Test substi	rate ale) rate ale)	ale)	Organ Bone marr		Value determine Experimental va
Result Negative Method Result Negative Result Negative Result Negative Result Negative Negative Negative Negative Negative	the mixture av	-O,O')tin	Equivale 474 Method OECD 47 Method OECD 47	74	Expos Expos 5 day	sure time sure time vs (6h/day)	Mouse (ma	rate ale) rate ale)	ale)	Organ Bone marr		Value determine Experimental va
Result Negative Megative Negative Negative Negative Negative Negative Megative Megative Megative Mogenicity Mil Crystal No (test)data on	n the mixture average of the mixture average	-O,O')tin  (  (  (  (  (  (  (  (  (  (  (  (  (	Equivale 474 Method OECD 47 Method OECD 47	74	Expos Expos 5 day	sure time sure time vs (6h/day)	Mouse (ma	rate ale) rate ale)	ale)	Organ Bone marr		Value determine Experimental va
Result Negative Megative Megative Megative Megative Megative Megative Megative Megative Megative Negative Negative Negative Negative Negative Negative Megative	n the mixture average of the mixture average	-O,O')tin  (  (  (  (  (  (  (  (  (  (  (  (  (	Equivale 474 Method OECD 47 Method OECD 47 OECD 47	74	Expo: 5 day 5 day	sure time sure time vs (6h/day)	Mouse (ma	rate ale) rate ale)	Value	Organ Bone marr		Value determine Experimental va
All Crystal No (test)data on B-(trimethoxysilva Result Negative  Microtylbis(penta Result Negative Megative Megative Negative	n the mixture average of the mixture average	-O,O')tin  ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	Equivale 474 Method OECD 47 Method OECD 47 OECD 47	74 774	Expos 5 day 5 day	sure time sure time rs (6h/day) r(s)	Test substi Mouse (ma Test substi Mouse (ma Mouse (fer	rate ale) rate ale) male)	Value detern Incond	Organ Bone marr	row	Value determin. Experimental va  Value determin. Weight of evide Weight of evide
All Crystal No (test)data on 8-(trimethoxysil Result Negative dioctylbis(penta Result Negative nethanol Result Negative Negative Negative Negative Negative Negative Negative Negative Negative Dermal	n the mixture average of the mixture average	-O,O')tin    Cooling	Equivale 474 Method OECD 47 Method OECD 47 OECD 47	74 74 Value	Expos 5 day 5 day	sure time sure time ss (6h/day) ss (6h/day) ss (5h/day) ss (6h/day)	Test substi Mouse (ma Test substi Mouse (ma Mouse (fer	rate ale) rate ale) male)	Value detern Incond	Organ Bone marr  Organ  Organ  Inination  Organ	row	Value determin Experimental va  Value determin Weight of evide Weight of evide  Effect No carcino
Ill Crystal Io (test)data on I-(trimethoxysil' Result Negative Ilioctylbis(penta Result Negative Negative Negative Negative Negative Negative Negative Iogenicity Icrystal Io (test)data on I-(trimethoxysil' Route of exposure Dermal	the mixture average of	-O,O')tin    Cooling	Equivale 474 Method OECD 47 Method OECD 47 OECD 47	74 74 Value	Expos 5 day 5 day	sure time  sure time /s (6h/day) /(s)  Exposure time  104 weeks (3 times/week)  Exposure time	Test substi Mouse (ma Test substi Mouse (ma Mouse (fer Species	rate ale) rate ale) male)	Value detern Inconcinsufficutal Value determ	Organ Bone marr Organ Organ Inination Iusive, Cient data	row	Value determin Experimental va  Value determin Weight of evide Weight of evide  Effect No carcino
All Crystal No (test)data on S-(trimethoxysil' Result Negative  dioctylbis(penta Result Negative methanol Result Negative Negative Negative Negative Negative Negative Definition Route of exposure Dermal Route of Route of	the mixture average of	/ailable  Method  Not furthed determine  Method  Equivalen OECD 453	Method OECD 47  Method OECD 47  OECD 47  OECD 47	Value  43.8 mg/wed  Value  2 1.3 mg/l ai	Expos 5 day 5 day	sure time  sure time  sure time  s (6h/day)  s (6h/day)  s (5)  Exposure time  104 weeks (3 times/week)  Exposure time  24 months (daily, 20h/day)	Test substi Mouse (ma Test substi Mouse (ma Mouse (fer Species Rat (male/fe	rate ale) rate ale) male)	Value detern Inconcinsufficution Value detern Weigh eviden	Organ Bone marr Organ Organ Inination Iusive, cient data Inination It of ce	Organ Skin	Value determin Experimental va  Value determin Weight of evide Weight of evide  Effect  No carcino effect
All Crystal No (test)data on S-(trimethoxysil' Result Negative  dioctylbis(penta Result Negative methanol Result Negative Negative Negative Negative Negative Negative Definition Route of exposure Dermal Route of exposure	n the mixture average of the mixture average	/ailable  Method  Not furthed determine  Method  Equivalen OECD 453  Equivalen OECD 453	Method OECD 47  Method OECD 47  OECD 47  OECD 47	Value  43.8 mg/wee  ≥ 1.3 mg/l ai	Expos 5 day 5 day	sure time  sure time sure time s (6h/day) s (6h/day) s (5)  Exposure time  104 weeks (3 times/week)  Exposure time  24 months (daily, 20h/day) 18 month(s)	Test substi Mouse (ma Test substi Mouse (ma Mouse (fer Species Mouse (male/fe Species Rat (male/fe Mouse (male/fe	rate ale) rate ale) male) male)	Value detern Inconc insuffic Value detern Weigh eviden	Organ Bone marr Organ Organ Inination Iusive, cient data Inination t of ce t of ce	Organ Skin	Value determin. Experimental va  Value determin. Weight of evide. Weight of evide.  Effect  No carcino effect  Effect
All Crystal No (test)data on S-(trimethoxysil Result Negative Megative Megative Megative Megative Megative Megative Negative Negative Negative Negative Negative Negative Negative Megative Mega	the mixture average of	vailable  Method  Not furthed determine  Method  Equivalen OECD 453  Equivalen	Method OECD 47  Method OECD 47  OECD 47  OECD 47	74  74  74  Value  43.8 mg/wer  ≥ 1.3 mg/l ai  ≥ 1.3 mg/l ai  466 mg/kg bw/day - 529	Expos 5 day 5 day	sure time  sure time  sure time  s (6h/day)  s (6h/day)  s (5)  Exposure time  104 weeks (3 times/week)  Exposure time  24 months (daily, 20h/day)	Test substi Mouse (ma Test substi Mouse (ma Mouse (fer Species Mouse (male/fe Species	male)	Value detern Inconc insuffic Value detern Weigh eviden Weigh	Organ Bone marr Organ Organ Inination Iusive, cient data Inination t of ce t of ce	Organ Skin	Value determin Experimental va  Value determin Weight of evide Weight of evide  Effect  No carcino effect
All Crystal No (test)data on S-(trimethoxysil Result Negative Megative Megative Megative Megative Megative Megative Negative Negative Negative Negative Negative Negative Negative Megative Mega	n the mixture average of the mixture average	/ailable  Method  Not furthed determine  Method  Equivalen OECD 453  Equivalen OECD 453	Equivale 474  Method OECD 47  Method OECD 47  OECD 47	Value  Value  2 1.3 mg/l ai  ≥ 1.3 mg/l ai  466 mg/kg bw/day - 52 mg/kg bw/d 1872 mg/kg bw/day - 210	Expos 5 day 5 day ir ir	sure time  sure time sure time s (6h/day) s (6h/day) s (5)  Exposure time  104 weeks (3 times/week)  Exposure time  24 months (daily, 20h/day) 18 month(s)	Test substi Mouse (ma Test substi Mouse (ma Mouse (fer Mouse (fer Species Rat (male/fe Mouse (male/fe Mouse (male/fe	male) male)	Value detern Incondinsuffic Value detern Weigh eviden Weigh eviden Experi	Organ Bone marr  Organ  Organ  Organ  Inination  Iusive, cient data  Inination  t of ce t of ce mental	Organ Skin	Value determin. Experimental va  Value determin. Weight of evide. Weight of evide.  Effect  No carcino effect  Effect
All Crystal No (test)data on 3-(trimethoxysil Result Negative Mesult Negative Methanol Result Negative Megative Megative Negative No (test)data on 3-(trimethoxysil Route of exposure Dermal Methanol Route of exposure Inhalation Inhalation Oral	nthe mixture average of the mixture average o	vailable  Method  Not furthed determine  Method  Equivalen OECD 453  Equivalen OECD 453  Other	Equivale 474  Method OECD 47  Method OECD 47  OECD 47	Value  2 1.3 mg/l ai  2 1.3 mg/l ai  2 1.3 mg/l ai  466 mg/kg bw/day - 52 mg/kg bw/d 1872 mg/kg	Expos 5 day 5 day ir ir	sure time sure time s (6h/day) (s)  Exposure time 104 weeks (3 times/week)  Exposure time 24 months (daily, 20h/day) 18 month(s)	Test substi Mouse (ma Test substi Mouse (ma Mouse (fer Mouse (fer Species Rat (male/fe Mouse (male/fe Rat (male/fe	male) male)	Value detern Inconcinsuffic Value detern Weigh eviden Experi value Experi	Organ Bone marr  Organ  Organ  Organ  Inination  Iusive, cient data  Inination  t of ce t of ce mental	Organ Skin	Value determin. Experimental va  Value determin. Weight of evide. Weight of evide.  Effect  No carcino effect  Effect  Overall effe

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# Reproductive toxicity

Fix All Crystal

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	EPA OTS 798.4900	100 mg/kg bw/day	14 days (gestation, daily)	Rat	No effect		Read-across
	LOAEL	EPA OTS 798.4900	600 mg/kg bw/day	14 days (gestation, daily)	Rat	Minor skeletal variations	Skeleton	Read-across
Maternal toxicity	NOAEL	Other	100 mg/kg bw/day	14 day(s)	Rat	No effect		Read-across
	LOAEL	Other	600 mg/kg bw/day	14 day(s)	Rat	Clinical signs; mortality; body weight; food consumption	General	Read-across
Effects on fertility	NOAEL	OECD 408	600 mg/kg bw/day	/ ( - /	Rat (male/female)	No effect		Read-across

 $\underline{bis(1,2,2,6,6-pentamethyl-4-piperidyl)} \ [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl] methyl] butylmalonate}$ 

	Parameter	Method	Value	Exposure time	Species	Effect	. 3.	Value determination
Developmental toxicity								Data waiving
Maternal toxicity								Data waiving
Effects on fertility	T	•	≥ 10 mg/kg bw/day	/ (- /	Rat (male/female)	No effect		Experimental value

dioctylbis(pentane-2,4-dionato-O,O')tin

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value
								determination
Maternal toxicity	NOAEL	OECD 422	0.3 mg/kg	28 day(s)	Rat	No effect	Thymus	Experimental
			bw/day - 0.5					value
			mg/kg bw/day					
Effects on fertility	NOAEL	OECD 422	0.3 mg/kg	28 day(s)	Rat	No effect		Experimental
			bw/day - 0.5		(male/female)			value
			mg/kg bw/day					

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n	net	ha	no

<u> </u>	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	1.33 mg/kg bw/day	11 days (gestation, daily)	Rat (female)	No effect		Weight of evidence
	LOAEC	Equivalent to OECD 414	6.65 mg/kg bw/day	11 days (gestation, daily)	Rat (female)	Litter size and weights; grossly visible abnormalities; external soft tissue; skeletal abnormalities		Weight of evidence
	LOAEL	Other	5000 mg/kg bw/day	6 - 10 days (gestation, daily)	Mouse			Experimental value
	LOAEL	Other	1700 mg/kg bw/day	6 - 10 days (gestation, daily)	Mouse			Experimental value
	NOAEC	Equivalent to OECD 414	1.33 mg/l air	6 - 15 days (gestation, daily)	Mouse			Experimental value
	NOAEC	Equivalent to OECD 414	1.33 mg/kg bw/day	11 days (gestation, daily)	Rat (female)	No effect		Weight of evidence
	LOAEC	Equivalent to OECD 414	6.65 mg/kg bw/day	11 days (gestation, daily)	Rat (female)	Litter weights		Weight of evidence
Maternal toxicity	NOAEL	Equivalent to OECD 414	1.33 mg/kg bw/day	11 days (gestation, daily)	Rat (female)	No effect		Weight of evidence
	LOAEL	Equivalent to OECD 414	6.65 mg/kg bw/day	11 days (gestation, daily)	Rat (female)	Reduced body weight and food consumption		Weight of evidence
	NOAEL	Equivalent to OECD 414	5000 mg/kg bw/day		Mouse (female)	No effect		Weight of evidence
Effects on fertility	NOAEC (P)	Equivalent to OECD 416	1.3 mg/l air	103 -108 day(s)	Rat (male/female)	No effect		Weight of evidence
	NOAEC (P/F1)	Other	2.39 mg/l air	355 day(s)	Monkey (female)	No effect		Weight of evidence
	NOAEL (P)	Other	< 1000 mg/kg bw/day	5 day(s)	Mouse (male)			Experimental value
	NOAEC (F1)	Equivalent to OECD 416	0.13 mg/l air	145-153 day(s)	Rat (male/female)	No effect		Weight of evidence
	NOAEC (F2)	Equivalent to OECD 416	0.13 mg/l air	54-56 day(s)	Rat (male/female)	No effect		Weight of evidence
		Equivalent to OECD 416	1.3 mg/l air	145-153 day(s)	Rat (male/female)	Reproductive performance		Weight of evidence
		Equivalent to OECD 416	1.3 mg/l air	54-56 day(s)	Rat (male/female)	Reproductive performance		Weight of evidence

Judgement is based on the relevant ingredients

# **Conclusion CMR**

Not classified for reprotoxic or developmental toxicity

Not classified for mutagenic or genotoxic toxicity

Not classified for carcinogenicity

# Toxicity other effects

Fix All Crystal

No (test)data on the mixture available

# <u>methanol</u>

Parameter	Method		Value	Organ		Effect	Exposure time	Species	Value
									determination
NOEC	Human		0.26 mg/l	Central n	ervous	No effect	4 h	Human	Weight of
	observat	ion		system					evidence
LDL0			4000 mg/kg bw		_	Mortality		Monkey	Experimental value
								(male/female)	

Chronic effects from short and long-term exposure

Fix All Crystal

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No effects known.

# SECTION 12: Ecological information

# 12.1 Toxicity:

# Fix All Crystal

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

		Parameter	Method	Value	Duration	Species			Value determination
								water	
Acute toxicity fishes		LC50	OECD 203	> 934 mg/l	96 h	Danio rerio	Semi-static	Fresh water	Read-across; GLP
·							system		
Acute toxicity invertebrates		EC50	OECD 202	<mark>331 m</mark> g/l	48 h	Daphnia magna	Static system	Fresh water	Read-across; GLP
Toxicity algae and other aqua	tic	EC50	EU Method	> 1000 mg/l	72 h	Desmodesmus	Static system	Fresh water	Read-across; GLP
plants			C.3			subspicatus			
Toxicity aquatic micro-		EC50	Other	43 mg/l	5.75 h	Pseudomonas	Static system	Fresh water	Read-across; GLP
organisms						putida			

bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt	Value determination
							water	
Acute toxicity fishes	LC50	OECD 203	> 100 mg/l	96 h	Danio rerio	Semi-static	Fresh water	Experimental value;
						system		GLP
Toxicity algae and other aquatic	EC50	Other	61 mg/l	72 h	Scenedesmus	Static system	Fresh water	Experimental value;
plants					subspicatus			Biomass
Long-term toxicity aquatic	NOEC	OECD 211	2 μg/l	21 day(s)	Daphnia magna	Semi-static	Fresh water	Experimental value;
invertebrates						system		GLP
Toxicity aquatic micro-	IC50	OECD 209	> 100 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value
organisms								

dioctylbis(pentane-2,4-dionato-0,0')tin

	Parameter	Method	Value	Duration	Species		Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	86 mg/l	96 h	Pisces	Static system		Experimental value
Acute toxicity invertebrates	EC50	OECD 202	<mark>58.6 mg/</mark> l	48 h	Daphnia magna	Static system		Experimental value
Toxicity algae and other aquatic	EC50	OECD 201	300 mg/l	24 h	Scenedesmus	Static system		Experimental value
plants					subspicatus			

methanol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EPA 600/3- 75/009	15400 mg/l	96 h	l	Flow-through system	Fresh water	Experimental value; Lethal
Acute toxicity invertebrates	EC50	DIN 38412-11	> 10000 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Lethal
	EC50	OECD 202	18260 mg/l	96 h		Semi-static system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquation plants	EC50	OECD 201	<mark>2200</mark> 0 mg/l	96 h	Pseudokirchnerie Ila subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC	Other	<mark>7900</mark> mg/l	200 h	Oryzias latipes	Static system	Fresh water	Experimental value
	EC50	Other	14536 mg/l	200 h	Oryzias latipes	Static system	Fresh water	Experimental value
Long-term toxicity aquatic invertebrates	NOEC		208 mg/l	2 day(s)	Daphnia magna			QSAR; Reproduction
Toxicity aquatic micro- organisms	IC50	OECD 209	> 1000 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value
Toxicity sediment organisms	EC50	Other	71700 mg/l	3 minutes	Tubifex tubifex	Static system	Fresh water	Experimental value; Locomotor effect

	Parameter	Method	Value	Duration	Species	Value determination
Toxicity soil macro-organisms	LC50	OECD 207	> 1 mg/cm² test mat.	48 h	Eisenia fetida	Experimental value
Toxicity terrestrial plants	EC50		60 mol/l	7 day(s)	Triticum aestivum	Weight of evidence

Classification is based on the relevant ingredients

#### **Conclusion**

Harmful to aquatic life with long lasting effects.

# 12.2 Persistence and degradability:

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Method	water	Value		Duration	Value determination
EU Method C.4		67 %; GLP		28 day(s)	Experimental value
Half-life water (t		į, <b></b> .		1 117	,
Method		Value		Primary	Value determination
				degradation/mineralisation	
		4 h; pH = 7		Primary degradation	QSAR
		[[3,5-bis(1,1-dimethy	<mark>/lethyl)-4</mark> -hydroxyphe	enyl]methyl]butylmalonate	
Biodegradation \	water	h			
Method		Value		Duration	Value determination
	2 Evolution Test -2,4-dionato-O,O')t	2 %		28 day(s)	Experimental value
Biodegradation \		<u>III</u>			
Method		Value		Duration	Value determination
	anometric Respiron	netry Test 9 %; GLP		28 day(s)	Experimental value
<u>ethanol</u>		, ,		***	
Biodegradation \	water				
Method		Value		Duration	Value determination
Other		82.7 %		5 day(s)	Experimental value
Other		71.5 %		5 day(s)	Experimental value
Other			<mark>%; Oxyge</mark> n consumpti		Experimental value
Other	ation oir (DTEO -/-)	95 %		5 day(s)	Experimental value
Method	ation air (DT <mark>50 air)</mark>	Value		Conc. OH-radicals	Value determination
Other		17.2 day(s	1	COIL. OFI-Faulcais	Experimental value
Biodegradation s	soil	117.2 uay(3	,		Experimental value
Method		Value		Duration	Value determination
Other		46.3 % - 53	34 %	5 day(s)	Experimental value
Crystal Kow ethod	Remark		Value	Temperature	Value determination
Kow lethod	Not ap	k plicable (mixture)	Value	Temperature	Value determination
Kow lethod (trimethoxysilyl)	Not ap		Value	Temperature	Value determination
Kow lethod	Not appropylamine		Value Value	Temperature  Temperature	Value determination  Value determination
Kow lethod (trimethoxysilyl) <sub>I</sub> Log Kow	Not appropylamine	plicable (mixture)			
Kow lethod (trimethoxysilyl); Log Kow Method	Not apportunine Rer	plicable (mixture) mark	Value 0.2	Temperature	Value determination
Kow lethod  (trimethoxysilyl); Log Kow Method  s(1,2,2,6,6-penta) BCF fishes	Not apportunine Rer	plicable (mixture) mark	Value 0.2	Temperature 20 °C	Value determination
(trimethoxysilyl); Log Kow Method S(1,2,2,6,6-penta BCF fishes Parameter	Not appropylamine Rer methyl-4-piperidyl	plicable (mixture)  mark  [[3,5-bis(1,1-dimethy   Value	Value 0.2 /lethyl)-4-hydroxyphe	Temperature 20 °C	Value determination
(trimethoxysilyl); Log Kow Method S(1,2,2,6,6-penta BCF fishes Parameter BCF	Not appropylamine    Rer	plicable (mixture)  mark    [[3,5-bis{1,1-dimethy	Value 0.2 //ethyl)-4-hydroxyphe	Temperature 20 °C enyl]methyl]butylmalonate	Value determination QSAR
(trimethoxysilyl); Log Kow Method Ss(1,2,2,6,6-penta BCF fishes Parameter BCF	Not appropylamine Rer methyl-4-piperidyl Method OECD 305	plicable (mixture)  mark    [[3,5-bis(1,1-dimeth)    Value   24.3 - 437.1	Value 0.2 /lethyl)-4-hydroxypha  Duration 60 day(s)	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio	Value determination QSAR  Value determination Experimental value
(trimethoxysilyl); Log Kow Method S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method	Not appropylamine Rer methyl-4-piperidyl Method OECD 305	plicable (mixture)  mark  [[3,5-bis(1,1-dimethy	Value 0.2 /lethyl)-4-hydroxypha  Duration 60 day(s)  Value	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature	Value determination QSAR  Value determination Experimental value  Value determination
(trimethoxysilyl); Log Kow Method  Ss(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107	Not appropylamine Rer methyl-4-piperidyl Method OECD 305	plicable (mixture)  mark    [[3,5-bis(1,1-dimeth)    Value   24.3 - 437.1	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C	Value determination QSAR  Value determination Experimental value  Value determination Experimental value
kow lethod  (trimethoxysilyl); Log Kow Method  s(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117	Not appropylamine Rer methyl-4-piperidyl Method OECD 305	plicable (mixture)  mark    [[3,5-bis(1,1-dimeth)    Value   24.3 - 437.1	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7 > 6.5	Temperature   20 °C	Value determination QSAR  Value determination Experimental value  Value determination Experimental value Experimental value Experimental value
kow lethod  (trimethoxysilyl) log kow Method  s(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method  OECD 107  OECD 117  Other	Not appropylamine    Rer	plicable (mixture)  mark    [[3,5-bis(1,1-dimeth)   Value   24.3 - 437.1  mark	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C	Value determination QSAR  Value determination Experimental value  Value determination Experimental value
kow lethod  (trimethoxysilyl) log kow Method  s(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane	Not appropylamine Rer methyl-4-piperidyl Method OECD 305	plicable (mixture)  mark    [[3,5-bis(1,1-dimeth)   Value   24.3 - 437.1  mark	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7 > 6.5	Temperature   20 °C	Value determination QSAR  Value determination Experimental value  Value determination Experimental value Experimental value Experimental value
kow lethod  (trimethoxysilyl) log kow Method  s(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method  OECD 107  OECD 117  Other	Not appropylamine  Rer  Method  OECD 305  Rer  -2,4-dionato-O,0')t	plicable (mixture)  mark    [[3,5-bis(1,1-dimeth)   Value   24.3 - 437.1  mark	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7 > 6.5	Temperature   20 °C	Value determination QSAR  Value determination Experimental value  Value determination Experimental value Experimental value Experimental value
Kow lethod  (trimethoxysilyl); Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane) Log Kow	Not appropulamine  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t	plicable (mixture)  mark    [[3,5-bis(1,1-dimeth)   Value   24.3 - 437.1  mark  in	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7 > 6.5 4.2	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C	Value determination QSAR  Value determination Experimental value  Value determination Experimental value Experimental value Experimental value Experimental value
Kow lethod  (trimethoxysilyl); Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane) Log Kow	Not appropulamine  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t	plicable (mixture)  mark    [[3,5-bis{1,1-dimethy}   Value   24.3 - 437.1  mark  in	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7 > 6.5 4.2	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C	Value determination QSAR  Value determination Experimental value  Value determination Experimental value Experimental value Experimental value Experimental value
Kow lethod  (trimethoxysilyl) Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane) Log Kow Method Method	Not appropylamine  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No	plicable (mixture)  mark  Value 24.3 - 437.1  mark  in  mark  data available	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7 > 6.5 4.2  Value	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C	Value determination QSAR  Value determination Experimental value  Value determination Experimental value Experimental value Experimental value Experimental value
kow lethod  (trimethoxysilyl)i Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method  BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method  BCF fishes Parameter	Not appropulamine  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No	plicable (mixture)  mark  Value 24.3 - 437.1  mark  in  mark data available  Value	Value 0.2 /lethyl)-4-hydroxypha  Duration 60 day(s)  Value 3.7 > 6.5 4.2  Value	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature	Value determination  QSAR  Value determination Experimental value  Value determination Experimental value Experimental value Experimental value Value determination  Value determination
kow lethod  (trimethoxysilyl); Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method  Method  BCF fishes	Not appropylamine  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No	plicable (mixture)  mark  Value 24.3 - 437.1  mark  in  mark  data available	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7 > 6.5 4.2  Value  Duration 72 h	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature  Species Leuciscus idus	Value determination QSAR  Value determination Experimental value Experimental value Experimental value Experimental value Value determination Value determination  Value determination  Experimental value
kow lethod  (trimethoxysilyl)i Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method  BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method  BCF fishes Parameter	Not appropulamine  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No	plicable (mixture)  mark  Value 24.3 - 437.1  mark  in  mark data available  Value	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7 > 6.5 4.2  Value  Duration 72 h 72 h	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature  Experimental control of the	Value determination QSAR  Value determination Experimental value
kow lethod  (trimethoxysilyl)i Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method  BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method  BCF fishes Parameter	Not appropulamine  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No	plicable (mixture)  mark  Value 24.3 - 437.1  mark  data available  Value < 10 1 3	Value   0.2	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature  Experimental control of the	Value determination QSAR  Value determination Experimental value
Kow lethod  (trimethoxysilyl); Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane) Log Kow Method BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane) Log Kow Method BCF fishes Parameter BCF	Not appropulamine  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No	plicable (mixture)  mark  Value 24.3 - 437.1  mark  in  mark data available  Value	Value 0.2 //ethyl)-4-hydroxyphe  Duration 60 day(s)  Value 3.7 > 6.5 4.2  Value  Duration 72 h 72 h	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature  Experimental control of the	Value determination QSAR  Value determination Experimental value
Kow lethod  (trimethoxysilyl); Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method BCF fishes Parameter BCF Log Kow Method  DECD 107 OECD 117 Other DECD 117 Other DECD 117 OTHER DECT DECT 117 OTHER DECT	Not appropulation  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No  Method  Other	plicable (mixture)  mark  Value 24.3 - 437.1  mark  data available  Value < 10 1 3 4.5	Value   0.2	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature  Species Leuciscus idus Cyprinus carpio Cyprinus carpio Cyprinus carpio Cyprinus carpio	Value determination QSAR  Value determination Experimental value  Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value
kow lethod  (trimethoxysilyl)i Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method BCF fishes Parameter BCF Log Kow Method  Log Kow Method  Log Kow Method	Not appropulation  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No  Method  Other	plicable (mixture)  mark  Value 24.3 - 437.1  mark  data available  Value < 10 1 3	Value   0.2   vlethyl)-4-hydroxyphe   Duration   60 day(s)   Value   3.7   > 6.5   4.2   Value   Duration   72 h   72 h   72 h   72 h   Value   Valu	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature  Experimental control of the	Value determination QSAR  Value determination Experimental value
Kow lethod  (trimethoxysilyl); Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other Octvlbis(pentane Log Kow Method BCF fishes Parameter BCF  Log Kow Method  Cotylbis(pentane BCF	Not appropulation  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No  Method  Other	plicable (mixture)  mark  Value 24.3 - 437.1  mark  data available  Value < 10 1 3 4.5	Value   0.2	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature  Species Leuciscus idus Cyprinus carpio Cyprinus carpio Cyprinus carpio Cyprinus carpio	Value determination QSAR  Value determination Experimental value  Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value
kow lethod  (trimethoxysilyl)i Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method BCF fishes Parameter BCF Log Kow Method OECD 107 Other octylbis(pentane Log Kow Method Other Colusion	Not appropulation  Rer  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No  Method  Other	mark  Value 24.3 - 437.1  mark  in  wark  Value 24.3 - 437.1  mark  data available  Value < 10 1 3 4.5  mark	Value   0.2   vlethyl)-4-hydroxyphe   Duration   60 day(s)   Value   3.7   > 6.5   4.2   Value   Duration   72 h   72 h   72 h   72 h   Value   Valu	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature  Species Leuciscus idus Cyprinus carpio Cyprinus carpio Cyprinus carpio Cyprinus carpio	Value determination QSAR  Value determination Experimental value
kow lethod  (trimethoxysilyl)i Log Kow Method  S(1,2,2,6,6-penta BCF fishes Parameter BCF Log Kow Method OECD 107 OECD 117 Other octylbis(pentane Log Kow Method BCF fishes Parameter BCF Log Kow Method OECD 107 Other octylbis(pentane Log Kow Method Other Colusion	Not appropylamine  Rer  methyl-4-piperidyl  Method  OECD 305  Rer  -2,4-dionato-O,O')t  Rer  No  Method  Other  Rer  Rer	mark  Value 24.3 - 437.1  mark  in  wark  Value 24.3 - 437.1  mark  data available  Value < 10 1 3 4.5  mark	Value   0.2   vlethyl)-4-hydroxyphe   Duration   60 day(s)   Value   3.7   > 6.5   4.2   Value   Duration   72 h   72 h   72 h   72 h   Value   Valu	Temperature 20 °C enyl]methyl]butylmalonate  Species Cyprinus carpio  Temperature 23 °C 23 °C 23 °C  Temperature  Species Leuciscus idus Cyprinus carpio Cyprinus carpio Cyprinus carpio Cyprinus carpio	Value determination  QSAR  Value determination Experimental value  Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value Experimental value

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### 12.4 Mobility in soil:

bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	3.04 - 8.1	Calculated value

# methanol

(log) Koc

Parameter	Method	Value	Value determination
Кос	SRC PCKOCWIN v1.66	1	Calculated value
	Other	0.13 - 0.61	Experimental value

Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
0.461 Pa.m³/mol		25 °C		Literature

#### Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level I	12.5 %	0 %	0 %	0 %	87.5 %	QSAR
Mackay level III	73.3 %		0.02 %	11.1 %	15.6 %	QSAR

#### Conclusion

Contains component(s) that adsorb(s) into the soil

# 12.5 Results of PBT and vPvB assessment:

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

#### 12.6 Other adverse effects:

#### Fix All Crystal

Global warming potential (GWP)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

#### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

#### 3-(trimethoxysilyl)propylamine

# Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

#### Ground water

Ground water pollutant

# bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate

# Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

### dioctylbis(pentane-2,4-dionato-O,O')tin

#### Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

# methanol

# Global warming potential (GWP)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

#### Ground water

Ground water pollutant

# SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

# 13.1 Waste treatment methods:

## 13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 04 09\* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other dangerous substances). Depending on branch of industry and production process, also other waste codes may be applicable. Hazardous waste according to Directive 2008/98/EC.

# 13.1.2 Disposal methods

Reason for revision: 2;12.2;14 Publication date: 2011-07-26
Date of revision: 2015-06-12

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Recycle/reuse. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment.

# 13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

ECTION 4.4.	- -	ut information			
ECHON 14:	ranspo	ort information			
Road (ADR)					
14.1 UN number	er:				
Transport			ı	Not subject	1
14.2 UN prope	shipping nar	me:	T .		1
14.3 Transport	hazard class(	es):			
	tification nu				1
Class					
Classification	n code				
14.4 Packing gr	oup:				4
Packing gro	ир				
Labels					
14.5 Environme	ntal hazards	:			•
		ous substance mark	r	10	1
14.6 Special pro	ecautions for	user:			-
Special pro					
Limited qua	ntities				
Deil (DID)					_
Rail (RID)			/		
14.1 UN numbe	er:			10.10	1
Transport	alata at · · ·			Not subject	j
14.2 UN prope					
14.3 Transport					1
	tification nu	mber			
Class					
Classification					
14.4 Packing gr					1
Packing gro	up		_		
Labels	ntal bazarda		-		
14.5 Environme			I.		1
		ous substance mark	Į.	10	
14.6 Special pro		user.	-		1
Limited qua					
					]
Inland waterw	ays (ADN)			_	
14.1 UN numbe	er:				
Transport			1	Not subject	
14.2 UN prope	shipping nar	me:			
14.3 Transport	hazard class(	es):			_
Class					
Classification					
14.4 Packing gr	oup:				
Packing gro	ир				
Labels					
14.5 Environme					_
		ous substance mark	r	10	
14.6 Special pr		user:			
Special pro					
Limited qua	ntities				
Sea (IMDG/IM	SBC)				
14.1 UN number	•				
			-	let subject	1
Transport	chinning nar	mo:		Not subject	j
14.2 UN prope 14.3 Transport			1		
Class	1142414 (1435)	cs).			1
14.4 Packing gr	oun:		- 4		j
Packing gro			- 4		
Labels	uμ		-		
Laneis			-		j
Reason for revision: 2;	12.2:14		1	Publication date: 2011-07-26	
			l '	Date of revision: 2015-06-12	
				Date of Tevision, 2013-00-12	
				B 1	46 15-
Revision number: 030	J			Product number: 51345	16 / 20

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Fix All Crystal					
14.5 Environmental hazards					
Marine pollutant		-			
Environmentally hazardo	ous substance mark	no			
14.6 Special precautions for	user:				
Special provisions					
Limited quantities					
14.7 Transport in bulk accord	ding to Annex II of Marpol and the IBC (	Code:			
Annex II of MARPOL 73/	78				
Air (ICAO-TI/IATA-DGR) 14.1 UN number:					
Transport		Not subject			
14.2 UN proper shipping nar	ne:				
14.3 Transport hazard class(					
Class					
14.4 Packing group:					
Packing group					
Labels					
14.5 Environmental hazards					
Environmentally hazardo	ous substance mark	no			
14.6 Special precautions for	user:				
Special provisions					
Passenger and cargo trai per packaging	nsport: limited quantities: maximum ne	et quantity			

# SECTION 15: Regulatory information

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

# **European legislation:**

VOC content Directive 2010/75/EU

VOC content	Remark	
< 2 %		

Indicative occupational exposure limit values (Directive 98/24/EC, 2000/39/EC and 2009/161/EU)

Product name	Skin resorption
Methanol	Skin

## REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008:  (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories and 2, 2.14 categories 1 and 2, 2.15 types A t F;  (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;  (c) hazard class 5.1.	
Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classe or categories set out in Annex I to Regulation (EC) No 1272/2008:  (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories and 2, 2.14 categories 1 and 2, 2.15 types A term of the first on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1;	phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless
criteria for any of the following hazard classe or categories set out in Annex I to Regulation (EC) No 1272/2008:  (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories and 2, 2.14 categories 1 and 2, 2.15 types A t F;  (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;  (c) hazard class 4.1;	<ul> <li>tricks and jokes,</li> <li>games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless</li> </ul>
or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories and 2, 2.14 categories 1 and 2, 2.15 types A t F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1;	<ul> <li>— games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market.3. Shall not be placed on the market if they contain a colouring agent, unless</li> </ul>
(EC) No 1272/2008:  (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories and 2, 2.14 categories 1 and 2, 2.15 types A t F;  (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;  (c) hazard class 4.1;	ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless
(a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories and 2, 2.14 categories 1 and 2, 2.15 types A t F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1;	market.3. Shall not be placed on the market if they contain a colouring agent, unless
types A and B, 2.9, 2.10, 2.12, 2.13 categories and 2, 2.14 categories 1 and 2, 2.15 types A terms of the company of the compa	
and 2, 2.14 categories 1 and 2, 2.15 types A t F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1;	s 1 required for fiscal reasons, or perfume, or both, if they
F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1;	a program or notal reasons, or perfurinc, or both, it they.
effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1;	— can be used as fuel in decorative oil lamps for supply to the general public, and,
effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1;	— present an aspiration hazard and are labelled with R65 or H304,4. Decorative oil lamps
development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1;	for supply to the general public shall not be placed on the market unless they conform to
effects, 3.9 and 3.10; (c) hazard class 4.1;	the European Standard on Decorative oil lamps (EN 14059) adopted by the European
(c) hazard class 4.1;	Committee for Standardisation (CEN).5. Without prejudice to the implementation of other
	Community provisions relating to the classification, packaging and labelling of dangerous
(d) hazard class 5.1.	substances and mixtures, suppliers shall ensure, before the placing on the market, that the
	following requirements are met:
	a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly,
	legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of
	children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of
	lamps — may lead to life- threatening lung damage";
	b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are
	legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may
	lead to life threatening lung damage";
	c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general
	public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.6.
	No later than 1 June 2014, the Commission shall request the European Chemicals Agency to
	prepare a dossier, in accordance with Article 69 of the present Regulation with a view to
	ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304,
	intended for supply to the general public.7. Natural or legal persons placing on the market
	for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1
	December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill
	lighter fluids labelled R65 or H304 to the competent authority in the Member State
	concerned. Member States shall make those data available to the Commission.'
	ostrocitics. The states stati make those and available to the commission.
dioctylbis(pentane-2,4-dionato-0,0')tin Organostannic compounds	
son for revision: 2;12.2;14	1. Shall not be placed on the market, or used, as substances or in mixtures where the

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substance or mixture is acting as biocide in free association paint.2. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture acts as biocide to prevent the fouling by micro-organisms, plants or animals of: (a) all craft irrespective of their length intended for use in marine, coastal, estuarine and inland waterways and lakes; (b) cages, floats, nets and any other appliances or equipment used for fish or shellfish (c) any totally or partly submerged appliance or equipment.3. Shall not be placed on the market, or used, as substances or in mixtures where the substance or mixture is intended for use in the treatment of industrial waters.4. Tri-substituted organostannic compounds: a) Tri-substituted organostannic compounds such as tributyltin (TBT) compounds and triphenyltin (TPT) compounds shall not be used after 1 July 2010 in articles where the concentration in the article, or part thereof, is greater than the equivalent of 0,1 % by weight of tin. b) Articles not complying with point (a) shall not be placed on the market after 1 July 2010, except for articles that were already in use in the Community before that date.5. Dibutyltin (DBT) compounds: a) Dibutyltin (DBT) compounds shall not be used after 1 January 2012 in mixtures and articles for supply to the general public where the concentration in the mixture or the article, or part thereof, is greater than the equivalent of 0.1% by weight of tin. b) Articles and mixtures not complying with point (a) shall not be placed on the market after 1 January 2012, except for articles that were already in use in the Community before that c) By way of derogation, points (a) and (b) shall not apply until 1 January 2015 to the following articles and mixtures for supply to the general public: one-component and two-component room temperature vulcanisation sealants (RTV-1 and RTV-2 sealants) and adhesives. – paints and coatings containing DBT compounds as catalysts when applied on articles, soft polyvinyl chloride (PVC) profiles whether by themselves or coextruded with hard - fabrics coated with PVC containing DBT compounds as stabilisers when intended for outdoor applications - outdoor rainwater pipes, gutters and fittings, as well as covering material for roofing and d) By way of derogation, points (a) and (b) shall not apply to materials and articles regulated under Regulation (EC) No 1935/2004.6. Dioctyltin (DOT) compound: (a) Dioctyltin (DOT) compounds shall not be used after 1 January 2012 in the following articles for supply to, or use by, the general public, where the concentration in the article, or part thereof, is greater than the equivalent of 0.1 % by weight of tin: textile articles intended to come into contact with the skin gloves. footwear or part of footwear intended to come into contact with the skin, wall and floor coverings, childcare articles, - female hygiene products, nappies, two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits). (b) Articles not complying with point (a) shall not be placed on the market after 1 January 2012, except for articles that were already in use in the Community before that date. methanol Substances classified as flammable gases 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol category 1 or 2, flammable liquids categories dispensers are intended for supply to the general public for entertainment and decorative 1, 2 or 3, flammable solids category 1 or 2, purposes such as the following: metallic glitter intended mainly for decoration, substances and mixtures which, in contact with water, emit flammable gases, category 1, artificial snow and frost, 2 or 3, pyrophoric liquids category 1 or "whoopee" cushions pyrophoric solids category 1, regardless of silly string aerosols, hether they appear in Part 3 of Annex VI to - imitation excrement, that Regulation or not. - horns for parties, - decorative flakes and foams artificial cobwebs - stink bombs.2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: "For professional users only".3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC.4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated. National legislation The Netherlands Fix All Crystal LWCA (the Netherlands): KGA category 04 Waste identification (the Netherlands) Waterbezwaarlijkheid SZW - List of reprotoxic Hazardous to the foetus substances (development) National legislation Germany Fix All Crystal WGK 1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4) Reason for revision: 2;12.2;14 Publication date: 2011-07-26 Date of revision: 2015-06-12

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3-(trimethoxysilyl)propylamine	2			
TA-Luft	5.2.5			
bis(1,2,2,6,6-pentamethyl-4-pi	peridyl) [[3,5-bis(1,1-dimethyleth	nyl)-4-hydroxyphenyl]methyl]bu	<u>ıtylmalonate</u>	
TA-Luft	5.2.1			
dioctylbis(pentane-2,4-dionato	o-O,O')tin			
Schwangerschaft Gruppe	D			
MAK 8-Stunden-Mittelwert mg/m <sup>3</sup>	Zinnverbindungen, organische gemessen als einatembare Fra	(als Sn berechnet); 0,1 mg/m³; ktion (vgl. Abschn. Vd) S. 191)	als Sn berechnet	
TA-Luft	5.2.5			
<u>methanol</u>				
Schwangerschaft Grup <mark>pe</mark>	С			
MAK 8-Stunden-Mittelwert	Methanol; 200 ppm			
ppm				
MAK 8-Stunden-Mittelwert	Methanol; 270 mg/m³			
mg/m³				
TA-Luft	5.2.5; I			

#### National legislation France

Fix All Crystal

No data available

#### National legislation Belgium

Fix All Crystal No data available

#### Other relevant data

Fix All Crystal

No data available

dioctylbis(pentane-2,4-dionato-0,0')tin

TLV - Carcinogen Tin organic compounds, as Sn; A4

# 15.2 Chemical safety assessment:

No chemical safety assessment is required.

# SECTION 16: Other information

# Full text of any H-statements referred to under headings 2 and 3:

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H370 Causes damage to the optic nerve and the central nervous system.

H371 May cause damage to the immune system if swallowed.

H372 Causes damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

(\*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

# M-factor

bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-	10	Chronic	ECHA	
dimethylethyl)-4-hydroxy <mark>phenyl]methyl]butylmalonate</mark>				
			_	ļ

# Specific concentration limits CLP

dioctylbis(pentane-2,4-d	ionato-O,O')tin	C > 5 %	Skin Sens. 1; H317	TIB Chemicals
methanol		C≥10%	STOT SE 1; H370	CLP Annex VI (ATP 0)
		3 % ≤ C < 10 %	STOT SE 2; H371	CLP Annex VI (ATP 0)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet

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